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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,997	05/26/2000	Stephen D. Smith	REDA:0093/ID99-10	9764

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EXAMINER

LAM, THANH

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 05/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action SummaryApplication No.
09/579,997Applicant(s)
Smith et al.Examiner
Thanh LamArt Unit
2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amndt. filed on 3/1/2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 21-23 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s): _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s): _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 6, 14-15, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Rabson (pn. 4,815,949).

Ekstromer discloses an electric motor, comprising: a plurality of stator sections (92, fig. 3A), each stator section including an outer housing (77), wherein the plurality of stator sections are mechanically and electrically coupleable to form a stator of a desired length; and a rotor (83), disposed within the plurality of stator sections.

Regarding claim 2, wherein the plurality of stator sections includes: a first stator section (top section 92, fig. 3a) having a plurality of conductors (167, fig. 4) extending longitudinally therethrough; a second stator section (mid section 92), electrically coupleable to an electrical power source (161) and to the first stator section; and a third stator section, electrically coupleable to the first stator section; wherein electricity flowing through the plurality of stator sections produces a magnetic field that imparts rotative motion to the rotor.

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Regarding claim 6, seals(115) disposed between stator sections.

Regarding claim 14, Rabson discloses a submersible pumping system, comprising: a submersible electric motor, including: a plurality of modular motor sections (92, fig. 3A), each motor section includes a stator section (92) and a housing section (77), wherein the modular motor sections are mechanically and electrically coupleable to form a motor of a desired length; a rotor (83) disposed within the plurality of modular motor sections; and a submersible pump (51), drivingly coupled to the rotor of the submersible electric motor.

Regarding claim 15, wherein the plurality of modular motor sections includes: a first stator section, having a plurality of conductors (167) extending longitudinally therethrough; a second stator section, electrically coupleable to a source of electrical power (161) and to the first stator section; and a third stator section, electrically coupleable to the first stator section; wherein electricity flowing through the plurality of stator sections produces a magnetic field that imparts rotative motion to the rotor.

Regarding claim 21, Rabson discloses an electric motor for a submergible pumping system, comprising: a plurality of stator sections (92) adapted to form a stator of a desired length, wherein each of the plurality of stator sections comprises a mechanical and electrical coupling to permit selective attachment to an adjacent stator section; and a rotor (24) disposed within the plurality of stator sections.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-5, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabson in view of Schob (pn. 5,939,813).

Rabson discloses all aspect of claimed invention except for stator sections are fluidly coupleable to allow a fluid flow therethrough.

Schob (fig. 3) discloses stator sections (3) are fluidly coupleable to allow a fluid flow (7a-c) therethrough, the purpose of the fluid flow is for cooling the stator sections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stator sections of Rabson to accommodate the stator sections to allow the fluid flows therethrough as taught by Schob. The fluid flows the stator sections in order to provide an improvement of cooling of the stator sections.

Regarding claim 5, Schob discloses the second stator section is fluidly coupleable to an external device (2).

Regarding claim 16, Rabson discloses all aspect of claimed invention except for the fluid to pass between the first stator section and a motor protector.

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Schob (fig. 3) discloses first stator section (3) and a motor protector (5a-b) are fluidly coupleable to allow a fluid flow (7a-c) therethrough, the purpose of the fluid flow is for cooling the stator sections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stator sections of Rabson to accommodate the first stator section to allow the fluid to pass between the first stator section and the motor protector therethrough as taught by Schob. The fluid flows therethrough the stator sections would provide an improvement of cooling for the stator sections.

3. Regarding claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rabson in view of Ekstromer (pn. 2,098,958).

Rabson discloses all aspect of claimed invention except for each stator section outer housing includes one of a threaded collar and a threaded end.

Ekstromer discloses each stator section outer housing (10) includes one of a threaded collar (26) and a threaded end (13) for the purpose of complementary the stator sections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the outer housing of Rabson and modify the housing including the threaded collar and the threaded end as taught by Ekstromer for ease to assembly the stator section.

4. Claims 7-12, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabson in view of Esktromer (1,960,484).

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Rabson discloses all aspect of claimed invention except for one stator section includes a plurality of conductors or conductive elements including a hollow receptacle sized to received a corresponding protrusion.

Ekstromer discloses stator sections (17) includes a plurality of conductors (38) or conductive elements (36) including a hollow receptacle (36 fig. 4) sized to received a corresponding protrusion (37) for the purpose of electrical and mechanical connecting between the stator sections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the stator sections of Rabson and modify to adapt the stator sections of Esktomer, having a plurality of conductors or conductive elements (38) including a hollow receptacle (36 fig. 4) sized to received a corresponding protrusion (37) in order to improve electrically and mechanically connection between the stator sections.

Regarding claim 10, Ekstromer discloses at least one stator section is coupled to an adjacent stator section by a separate coupling device (see the combination of 36 and 37 of fig. 4).

Regarding claim 11, wherein the coupling device is configured to mechanically and electrically couple (see the combination of 36 and 37 of fig. 4) the at least one stator section to the adjacent stator section.

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Response to Arguments

5. Applicant's arguments filed 3/1/2002 have been fully considered but they are not persuasive.

In response to applicant's argument that "Rabson reference has an armature or mover 83, not a rotor." The examiner submits that Rabson reference discloses electric motors (col. 1, line 9) that inherently have a stator and a **rotor** as known in the electric motor art. Furthermore, the term "armature 83" as disclosed by Rabson is a rotor as clearly defined by Webster's dictionary (see a highlight of the attached copy).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.



Thanh Lam

Patent Examiner

May 3, 2002



THANH LAM
PRIMARY EXAMINER